

## Claims

What is claimed is:

1. A carrier medium comprising program instructions executable to:  
5 dynamically determine a plurality of possible parameter values;  
display a graphical user interface for selecting a parameter value, wherein the graphical user interface visually indicates the plurality of possible parameter values;  
receive user input to the graphical user interface to select a first parameter value from the plurality of possible parameter values; and  
10 programmatically include the first parameter value in a software program in response to the user input selecting the first parameter value.
2. The carrier medium of claim 1,  
wherein said dynamically determining the plurality of possible parameter values  
15 comprises determining the plurality of possible parameter values based on a configuration of a computer system.
3. The carrier medium of claim 2,  
wherein said determining the plurality of possible parameter values based on a  
20 configuration of a computer system comprises determining the plurality of possible parameter values based on a hardware configuration of the computer system.
4. The carrier medium of claim 3,  
wherein said determining the plurality of possible parameter values based on the  
25 hardware configuration of the computer system comprises programmatically examining information regarding the hardware configuration of the computer system.
5. The carrier medium of claim 3,

wherein said determining the plurality of possible parameter values based on the hardware configuration of the computer system comprises programmatically querying software associated with one or more hardware devices coupled to the computer system.

5           6.       The carrier medium of claim 2,

wherein said dynamically determining the plurality of possible parameter values based on the configuration of the computer system comprises dynamically determining a first plurality of possible parameter values;

wherein the program instructions are executable to dynamically determine a  
10 second plurality of possible parameter values based on the configuration of the computer system after the configuration of the computer system has been changed.

7.       The carrier medium of claim 1,

wherein said dynamically determining the plurality of possible parameter values  
15 comprises dynamically determining one or more parameter values corresponding to hardware devices coupled to a computer system;

wherein the first parameter value corresponds to a first hardware device;

wherein said programmatically including the first parameter value in the software program comprises configuring the software program with a reference to the first  
20 hardware device.

8.       The carrier medium of claim 1,

wherein said dynamically determining the plurality of possible parameter values comprises dynamically determining one or more parameter values corresponding to  
25 resources of one or more hardware devices;

wherein the first parameter value corresponds to a first resource of a first hardware device;

wherein said programmatically including the first parameter value in the software program comprises configuring the software program with a reference to the first resource of the first hardware device.

5           9.       The carrier medium of claim 1,  
              wherein said dynamically determining the plurality of possible parameter values  
comprises dynamically determining one or more GPIB resources;  
              wherein the first parameter value comprises a first GPIB resource;  
              wherein said programmatically including the first parameter value in the software  
10       program comprises configuring the software program with a reference to the first GPIB  
resource.

              10.       The carrier medium of claim 1,  
              wherein said dynamically determining the plurality of possible parameter values  
15       comprises dynamically determining one or more Visa resources;  
              wherein the first parameter value comprises a first Visa resource;  
              wherein said programmatically including the first parameter value in the software  
program comprises configuring the software program with a reference to the first Visa  
resource.

20           11.       The carrier medium of claim 1,  
              wherein said dynamically determining the plurality of possible parameter values  
comprises dynamically determining one or more DAQ resources;  
              wherein the first parameter value comprises a first DAQ resource;  
25       wherein said programmatically including the first parameter value in the software  
program comprises configuring the software program with a reference to the first DAQ  
resource.

              12.       The carrier medium of claim 1,

wherein said dynamically determining the plurality of possible parameter values comprises dynamically determining one or more universal resource locators (URLs);

wherein the first parameter value comprises a first URL;

wherein said programmatically including the first parameter value in the software  
5 program comprises configuring the software program with a reference to the first URL.

13. The carrier medium of claim 1, further comprising program instructions executable to:

receive user input specifying filtering criteria for the parameter values;

10 wherein the graphical user interface visually indicates only a subset of the possible parameter values, wherein the subset is determined based on the specified filtering criteria.

14. The carrier medium of claim 1, further comprising program instructions  
15 executable to:

receive user input requesting to display the graphical user interface for selecting a parameter value;

wherein said displaying the graphical user interface is performed in response to the user input requesting to display the graphical user interface.

20

15. The carrier medium of claim 1,

wherein said programmatically including the first parameter value in the software program comprises programmatically including the first parameter value in one of:

a function call in the software program; or

25 a method call in the software program.

16. The carrier medium of claim 1,

wherein the software program comprises a graphical program;

wherein said programmatically including the first parameter value comprises programmatically including the first parameter value in the graphical program.

17. The carrier medium of claim 16,  
5 wherein said programmatically including the first parameter value in the graphical program comprises programmatically configuring a node in the graphical program with the first parameter value.

18. The carrier medium of claim 17,  
10 wherein said programmatically configuring the node in the graphical program with the first parameter value comprises connecting the first parameter value to the node.

19. The carrier medium of claim 17,  
15 wherein said programmatically configuring the node in the graphical program with the first parameter value comprises configuring the node to utilize the first parameter value.

20. The carrier medium of claim 1,  
20 wherein said displaying the graphical user interface comprises displaying the graphical user interface in a separate window.

21. The carrier medium of claim 1,  
25 wherein said displaying the graphical user interface comprises displaying the graphical user interface in a portion of a program window for the software program.

22. The carrier medium of claim 1,  
wherein the graphical user interface displays the plurality of possible parameter values as a list;

wherein said receiving user input to the graphical user interface to select the first parameter value comprises receiving user input to the graphical user interface to select the first parameter value from the list.

5           23.     The carrier medium of claim 1,  
              wherein said dynamically determining the plurality of possible parameter values includes dynamically determining one or more property values;

              wherein said receiving user input to the graphical user interface to select the first parameter value comprises receiving user input to the graphical user interface to select a  
10     first property value;

              wherein the first property value is programmatically included in the software program in response to the user input selecting the first property value.

              24.     A carrier medium comprising program instructions executable to:  
15     determine a plurality of parameter values based on a hardware configuration of a computer system;

              display a graphical user interface for selecting a parameter value, wherein the graphical user interface visually indicates the plurality of parameter values;

              receive user input to the graphical user interface to select a first parameter value  
20     from the plurality of parameter values; and

              programmatically include the first parameter value in a software program in response to the user input selecting the first parameter value.

25           25.     A carrier medium comprising program instructions executable to:  
              determine a plurality of resources of one or more measurement devices coupled to a computer system;

              display a graphical user interface visually indicating a plurality of parameter values, wherein each parameter value corresponds to one of the resources;

receive user input to the graphical user interface to select a first parameter value from the plurality of parameter values; and

programmatically include the first parameter value in a software program in response to the user input selecting the first parameter value.

5

26. A system comprising:

a processor;

a memory coupled to the processor, wherein the memory stores program  
10 instructions;

wherein the processor is operable to execute the program instructions stored in the memory to:

dynamically determine a plurality of possible parameter values;

display a graphical user interface for selecting a parameter value, wherein the  
15 graphical user interface visually indicates the plurality of possible parameter values;

receive user input to the graphical user interface to select a first parameter value from the plurality of possible parameter values; and

programmatically include the first parameter value in a software program in response to the user input selecting the first parameter value.

20

27. A method for modifying a software program, the method comprising:

dynamically determining a plurality of possible parameter values;

displaying a graphical user interface for selecting a parameter value, wherein the  
25 graphical user interface visually indicates the plurality of possible parameter values;

receiving user input to the graphical user interface to select a first parameter value from the plurality of possible parameter values; and

programmatically including the first parameter value in the software program in response to the user input selecting the first parameter value.

28. A medium configured to:  
dynamically determine a plurality of possible parameter values;  
5 display a graphical user interface for selecting a parameter value, wherein the  
graphical user interface visually indicates the plurality of possible parameter values;  
receive user input to the graphical user interface to select a first parameter value  
from the plurality of possible parameter values; and  
programmatically include the first parameter value in a software program in  
10 response to the user input selecting the first parameter value.